

Field Crops

Growing Season Weather Summary

The 2000 growing season will be best characterized as a season of weather contrasts, both in terms of temperature and of precipitation. Lack of moisture was a major concern early in the season following a prolonged period of below normal precipitation over much of the state since the fall of 1998. By climatological standards, a drier than normal pattern this long is extremely unusual in Michigan. This has at least temporarily reversed a long-term regional trend of increasing precipitation (since the 1930's). As a result, soil moisture reserves across the state in April were at their lowest levels since the spring of 1988 and surface/subsurface water levels had fallen well below historical norms. For instance, Great Lakes levels fell to the lowest levels since 1965.

The state was on the northern fringes of a broad area of abnormal dryness stretching from the central Great Plains eastward into the Ohio Valley. In addition to the dry conditions, the early spring season was abnormally mild (among the five warmest February/March periods of the past century), bringing overwintering crops out of dormancy early and warming soils enough to support early spring planting.

With abnormally dry soils across large sections of the central U.S., and with moderate to strong La Nina conditions in the equatorial Pacific, long lead outlooks at the time called for a warmer and drier than normal summer. Unexpectedly, an upper air troughing pattern set up across the Upper Midwest in May and persisted for several weeks. This pattern brought a series of low pressure centers and associated frontal boundaries through the region which led to several rounds of heavy rain. Rainfall totals across Michigan for the month of May ranged from less than 3

inches in northern sections of the state to more than 8 inches (more than 200 percent of normal rates) at some southern locations. The precipitation eased long-term dryness but led to lengthy planting and fieldwork delays. Some locations exceeded all-time records for maximum monthly precipitation totals.

A shift of the jet stream to a more northwest to southeast configuration across the Great Lakes and New England in June led to a cooler than normal temperature pattern which continued into August. Mean temperatures for July generally ranged from 1-5 degrees F below normal, leading to the coolest July and June-August period since the summer of 1992. Scattered frost and freezing temperatures were reported across the upper and northern Lower Peninsulas during July 19-20, breaking records at some locations for an event so late in the season. By mid-summer, growing degree day accumulations had fallen back (from above normal levels earlier in the season) to below normal levels, slowing crop growth and development, especially in eastern sections of the state.

A return to an upper air ridging pattern across the Midwest during late September and much of October brought warmer, drier weather, which when combined with a later than normal first killing freeze of the fall, allowed many crops slowed by earlier cool temperatures to reach maturity. Overall, for the five-month May-September period, mean temperatures and growing degree day accumulations ranged from near to below normal statewide. Precipitation was highly variable, ranging from below normal totals in northern sections of the state, to much above normal levels in the south.

Field crops: Acres harvested and value of production, 1996-2000

Item	Unit	1996	1997	1998	1999	2000
Acres harvested	1,000 acres	6,695	6,740	6,653	6,730	6,653
Value of production	1,000 dollars	1,723,530	1,892,458	1,503,206	1,569,098	1,464,068

Grain storage capacity, December 1, 1996-2000

Year	Off farm		On farm capacity <i>Million bushels</i>
	Facilities	Rated capacity	
	<i>Number</i>	<i>Million bushels</i>	
1996	292	146	240
1997	289	146	250
1998	286	143	270
1999	270	141	280
2000	250	141	280

Field crops: Record highs and lows

Crop	Unit	Record high		Record low		Year estimates started
		Quantity	Year	Quantity	Year	
Barley						
Harvested acres	1,000 acres	303	1932	16	1974	1866
Yield per acre	Bushels	68.0	1985	13.5	1933	
Production	1,000 bu	8,400	1918	546	1866	
Dry Edible beans						
Harvested acres	1,000 acres	690	1930	170	1988	1909
Yield per acre	Pounds	2,100	1999	320	1917	
Production	1,000 cwt	8,585	1963	1,656	1916	
Corn for grain						
Harvested acres	1,000 acres	2,800	1981	480	1866	1866
Yield per acre	Bushels	130.0	1999	21.5	1917	
Production	1,000 bu	293,180	1982	15,120	1869	
Corn for silage						
Harvested acres	1,000 acres	498	1971	211	1942	1924
Yield per acre	Tons	17.5	1999	4.7	1930	
Production	1,000 tons	5,565	1977	1,542	1930	
Hay, alfalfa						
Harvested acres	1,000 acres	1,444	1950	74	1919	1919
Yield per acre	Tons	4.2	1993	1.1	1934	
Production	1,000 tons	5,040	1985,1986	118	1919	
Hay, all						
Harvested acres	1,000 acres	2,907	1924	780	1866	1866
Yield per acre	Tons	3.8	1993	0.6	1895	
Production	1,000 tons	5,743	1986	1,014	1866	
Oats						
Harvested acres	1,000 acres	1,658	1918	60	1996	1866
Yield per acre	Bushels	67.0	1985,1989	18.5	1921	
Production	1,000 bu	69,388	1946	3,600	1996	
Potatoes						
Harvested acres	1,000 acres	374.0	1895	36.4	1975	1866
Yield per acre	Cwt	315.0	1998,1999,2000	26.0	1887,1916	
Production	1,000 cwt	23,256	1904	3,557	1876	
Soybeans						
Harvested acres	1,000 acres	2,080	2000	1	1930	1924
Yield per acre	Bushels	40.0	1995,1999	8.0	1927	
Production	1,000 bu	77,600	1999	10	1930	
Spearmint						
Harvested acres	1,000 acres	8.7	1954	0.7	1935	1935
Yield per acre	Pounds	47.0	1935	20.0	1965	
Production	1,000 lbs	280	1948	27	1996	
Sugarbeets						
Harvested acres	1,000 acres	190	1999	48	1943	1909
Yield per acre	Tons	21.3	1970	5.5	1916	
Production	1,000 tons	3,534	1999	298	1943	
Wheat, winter						
Harvested acres	1,000 acres	1,515	1953	400	1987	1909
Yield per acre	Bushels	72.0	2000	10.5	1912	
Production	1,000 bu	45,600	1984	7,350	1912	

Barley

Michigan barley growers planted 20,000 acres and harvested 19,000 acres in 2000. This represents a 13 percent decrease in the number of acres planted and a 10 percent decrease in the number of acres of harvested. Total production was 1.14 million bushels, down 18 percent from 1999. The average yield decreased 6 bushels to 60 bushels per acre. Michigan's barley crop advanced to harvest

with favorable weather conditions. Rainfall was well above normal in the Lower Peninsula and temperatures were cooler than normal statewide. Menominee, Delta, Iosco, Tuscola, and Montmorency counties were the top five barley producing counties in the state.

Barley: Acres, yield, production, and value, 1996-2000

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Bushels</i>	<i>1,000 bushels</i>	<i>Dollars</i>	<i>1,000 dollars</i>
1996	28	25	48	1,200	2.40	2,880
1997	25	22	58	1,276	1.90	2,424
1998	27	23	50	1,150	1.50	1,725
1999	23	21	66	1,386	1.70	2,356
2000	20	19	60	1,140	1.10	1,254

¹ Marketing year average.

Corn

Michigan had 2.2 million acres planted to corn in 2000, the same as in 1999. Grain corn production was 244.3 million bushels, down 4 percent from 1999; 1.97 million acres were harvested for grain. The yield of 124 bushels per acre was down 6 bushels from the record high of 1999. Michigan ranked eleventh among states in corn for grain production. Farmers harvested 225,000 acres of corn for silage with an average yield of 14.0 tons per acre.

Planting of corn in Michigan began in earnest the last week of April and progress was ahead of average through the first half of May. Continual rains slowed progress the second half of May, but the crop was planted on schedule, by mid June. Many emerged plants were yellowed by cool soil temperatures and slow emergence. By June 11, about 55 percent of the acres were in good-excellent condition. Michigan's corn crop was about one week behind normal schedule as of September 1. Cumulative growing

degree days were 50-150 below normal in major growing areas. Soil moisture was plentiful throughout the major corn for grain areas. Almost 70 percent of the crop was in good-excellent condition. Cool, wet conditions predominated for most of September reducing crop prospects. By October 1 Michigan's corn crop remained behind normal. Over 70 percent of the crop was in good-excellent condition. The Michigan corn harvest was only one-third done by November 1, behind the normal 50 % pace. Harvest neared completion by December 1. About 5 % of the crop remained to be harvested.

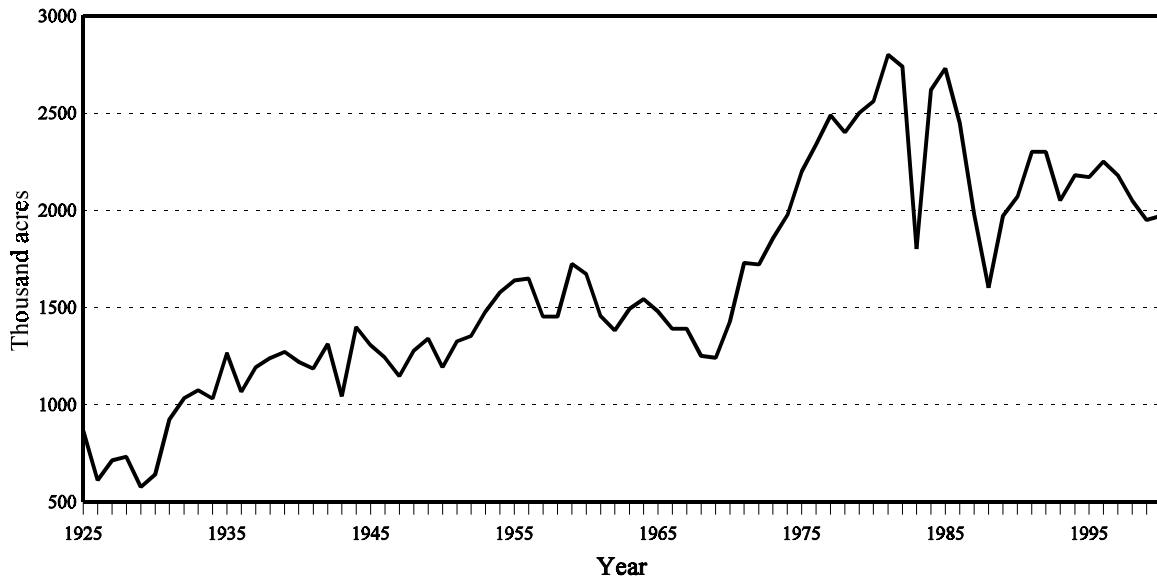
The 2000 corn crop was valued at \$464 million, up 3 percent from 1999. Corn continued to be Michigan's number one crop in value of production. The top five counties in corn production in 2000 were Huron, St. Joseph, Lenawee, Sanilac, and Saginaw.

Corn: Acres, yield, production, and value, 1996-2000

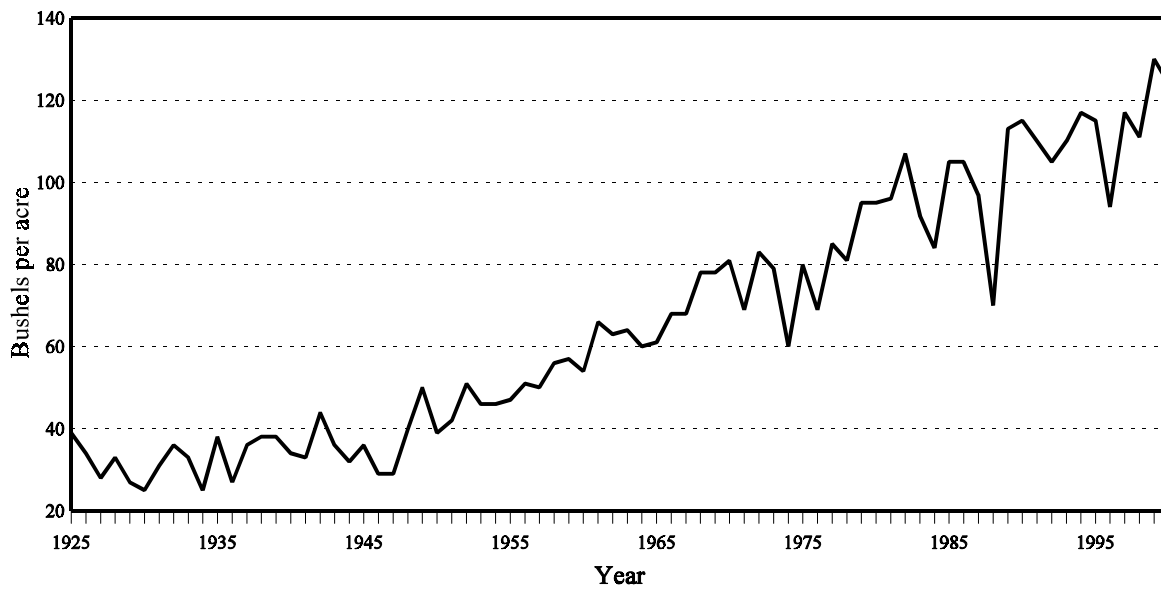
Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Bushels</i>	<i>1,000 bushels</i>	<i>Dollars</i>	<i>1,000 dollars</i>
All						
1996	2,600					
1997	2,500					
1998	2,300					
1999	2,200					
2000	2,200					
Grain						
1996		2,250	94	211,500	2.66	562,590
1997		2,180	117	255,060	2.40	612,144
1998		2,050	111	227,550	1.90	432,345
1999		1,950	130	253,500	1.78	451,230
2000		1,970	124	244,280	1.90	464,132
Silage	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Tons</i>	<i>1,000 tons</i>		
1996		310	12.5	3,875		
1997		300	14.5	4,350		
1998		240	12.5	3,000		
1999		235	17.5	4,113		
2000		220	14.0	3,080		

¹ Marketing year average.

Corn for grain acres, 1925-2000



Corn yield, 1925-2000



Corn for grain: Stocks by quarter, 1996-2000

Crop year	December 1		March 1		June 1		September 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>
1996	125,000	49,882	65,000	36,842	36,000	16,748	11,000	5,445
1997	150,000	55,615	80,000	53,870	46,000	30,017	22,000	15,223
1998	150,000	59,500	90,000	44,200	58,000	21,000	22,000	13,650
1999	135,000	68,300	95,000	49,700	53,000	30,500	26,000	15,000
2000	145,000	58,200	90,000	46,800	55,000	24,400		

Corn: Percentage of acreage planted, 1996-2000

Year	Month and day					
	April		May			June
	20	30	10	20	30	10
1996	0	0	14	27	65	92
1997	0	15	48	67	88	98
1998	0	20	50	88	96	100
1999	0	5	46	80	94	99
2000	0	3	39	69	84	92
5-year-average	0.0	8.6	39.4	66.2	85.4	96.2

Corn: Percentage of acreage silked, 1996-2000

Year	Month and day					
	July			August		
	1	10	20	30	10	20
1996	0	0	2	19	67	88
1997	0	0	3	33	83	99
1998	0	11	40	79	95	100
1999	0	10	46	88	100	100
2000	0	1	16	31	78	91
5-year-average	0.0	4.4	21.4	50.0	84.6	95.4

Corn: Percentage of acreage dent stage, 1996-2000

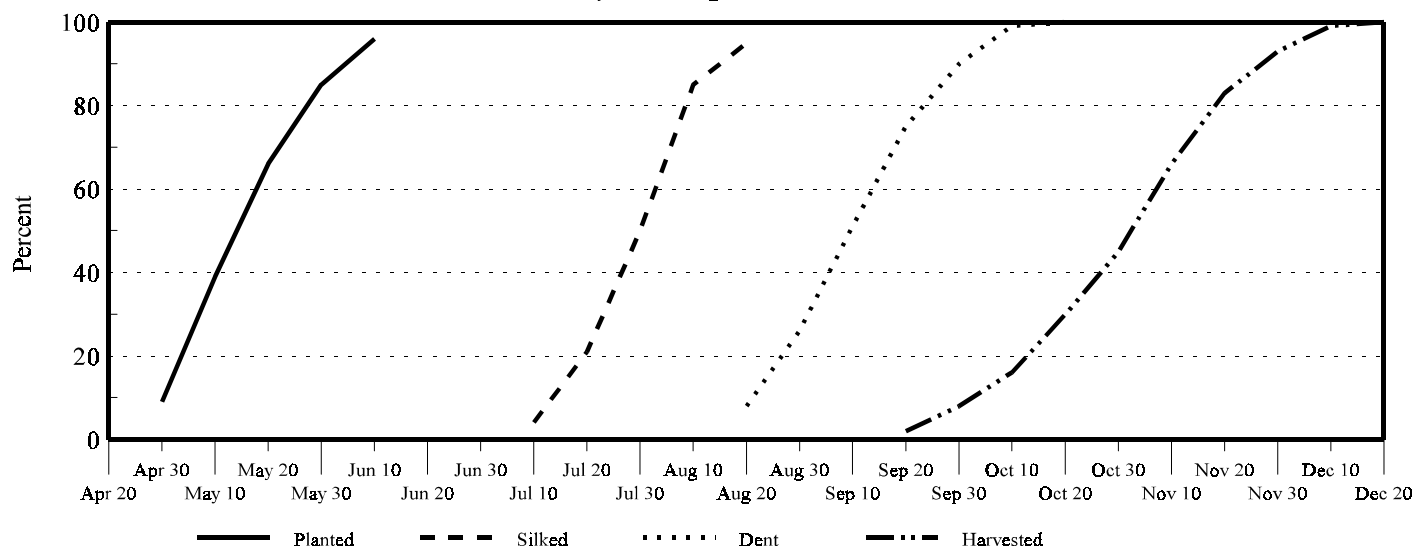
Year	Month and day						
	August			September			October
	10	20	30	10	20	30	10
1996	0	0	8	26	57	84	98
1997	0	0	4	20	55	80	97
1998	0	19	60	90	94	100	100
1999	0	17	50	85	97	100	100
2000	0	3	9	33	73	86	100
5-year-average	0.0	7.8	26.2	50.8	75.2	90.0	99.0

Corn: Percentage of acreage harvested for grain, 1996-2000

Year	Month and day									
	September			October			November			December
	10	20	30	10	20	30	10	20	30	10
1996	0	0	2	8	13	28	52	79	92	100
1997	0	0	1	4	7	11	31	62	80	97
1998	0	5	19	32	55	71	87	98	100	100
1999	2	7	13	28	50	76	89	96	99	100
2000	0	0	3	8	24	40	70	81	94	100
5-year-average	0.4	2.4	7.6	16.0	29.8	45.2	65.8	83.2	93.0	99.4

Corn progress

Five-year-average, 1996-2000



Dry Edible Beans

Michigan's 2000 total dry bean production was 4,125,000 hundredweight (cwt) which represents 16% of US production. Michigan ranked second in dry bean production for 2000. The number one dry bean producer in the nation was North Dakota with 7,613,000 cwt.

Michigan dry bean plantings started later than normal due to frequent rainfall. Some replanting was needed but planting did finish ahead of normal. Excessive rain and standing water on July 28-30 damaged substantial acreages. Remaining dry bean acreage had generally well above normal soil moisture levels. Cool, wet

conditions in September slowed crop development. Yields averaged 1,500 pounds per acre, down 600 pounds from the record 1999 crop.

Michigan continues to lead the country in Navy, Cranberry, Black and Light Red Kidney bean production. Michigan dry beans are consumed throughout the world and are largely shipped to the United Kingdom, Japan, France, Mexico, and Italy. Dry Beans are and continue to be an important and valuable commodity to Michigan agriculture.

Dry beans: Acres, yield, production, and value, 1996-2000

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Cwt</i>	<i>1,000 cwt</i>	<i>Dol/cwt</i>	<i>1,000 dollars</i>
1996	340	320	1,450	4,640	21.70	100,688
1997	315	305	1,620	4,941	18.90	93,385
1998	300	295	1,500	4,425	21.60	95,580
1999	350	350	2,100	7,350	16.80	123,480
2000	285	275	1,500	4,125	13.90	57,338

¹ Marketing year average.

Dry edible beans: Acres, yield, and production, by class, 1996-2000

Class and Year	Planted	Harvested	Yield	Production
	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>1,000 cwt</i>
Black				
1996	60	57	1,650	940
1997	80	78	1,790	1,400
1998	135	134	1,570	2,100
1999	108	108	2,090	2,260
2000	55	53	1,580	840
Cranberry				
1996	27	25	1,600	400
1997	32	31	1,680	520
1998	27	26	1,100	285
1999	31	31	1,600	496
2000	26	25	1,520	380
Navy				
1996	210	200	1,400	2,800
1997	150	145	1,580	2,290
1998	75	74	1,600	1,180
1999	150	150	2,300	3,450
2000	125	120	1,500	1,800
Pinto				
1996	9	8	1,500	120
1997	10	10	1,400	140
1998	21	20	1,470	293
1999	9	9	1,890	170
2000	21	20	1,450	290
Red kidney, dark				
1996	11	9	1,110	100
1997	12	12	1,040	120
1998	9	9	1,000	90
1999	9	9	1,700	153
2000	12	12	1,520	182
Red kidney, light				
1996	12	10	1,400	140
1997	14	14	1,640	230
1998	14	13	1,310	170
1999	17	17	1,800	306
2000	19	19	1,500	285
Small, red				
1996	3	3	1,170	35
1997	10	9	1,670	150
1998	11	11	1,820	200
1999	15	15	2,070	310
2000	8	8	1,410	113
Other				
1996	8	8	1,310	105
1997	7	7	1,400	91
1998	8	8	1,340	107
1999	11	11	1,860	205
2000	19	18	1,310	235

Dry edible beans: Stocks in commercial elevators, 1996-2000

Month and Year	Navy	All other	Total
	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>
December 31			
1996	3,400	1,550	4,950
1997	2,850	1,700	4,550
1998	1,400	2,100	3,500
1999	2,900	2,900	5,800
2000	2,800	2,500	5,300
August 31			
1996	1,400	700	2,100
1997	1,530	240	1,770
1998	1,050	180	1,230
1999	210	720	930
2000	1,850	1,750	3,600

Hay and Haylage

Michigan hay production was estimated at 4.3 million tons, down 2 percent from 1999. Alfalfa and alfalfa mixtures accounted for 85 percent of all dry hay produced. All hay harvested acres to 1.3 million, the same as last year. The average all hay yield was 3.33 tons per acre, down 0.07 tons from 1999. Michigan's hay crop benefitted from optimum growing conditions. Ample moisture and

favorable temperatures pushed quality and quantity produced. Supply was so great that some producers left hay in fields. Alfalfa and alfalfa mixtures accounted for 1 million acres of the total with a yield of 3.7 tons per acre. Other hay accounted for 300,000 acres with a yield of 2.1 tons per acre. Value of the hay crop was \$271.4 million, down 21 percent from 1999.

Hay, haylage, and greenchop: Acres, yield, production, and value, 1996-2000

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Tons</i>	<i>1,000 tons</i>	<i>Dollars</i>	<i>1,000 dollars</i>
All dry hay						
1996		1,300	3.22	4,190	106.00	442,895
1997		1,250	3.01	3,760	101.00	378,530
1998		1,250	2.85	3,565	86.00	306,410
1999		1,300	3.40	4,415	69.00	305,805
2000		1,300	3.33	4,330	62.00	271,410
Alfalfa hay						
1996		950	3.60	3,420	108.00	369,360
1997		900	3.40	3,060	103.00	315,180
1998		850	3.30	2,805	90.00	252,450
1999		950	3.80	3,610	72.00	259,920
2000		1,000	3.70	3,700	64.50	238,650
Alfalfa seedings						
1997	160					
1998	95					
1999	100					
2000	140					
Other hay						
1996		350	2.20	770	95.50	73,535
1997		350	2.00	700	90.50	63,350
1998		400	1.90	760	71.00	53,960
1999		350	2.30	805	57.00	45,885
2000		300	2.10	630	52.00	32,760
All haylage and greenchop						
2000		310	5.76	1,785		
Alfalfa haylage and greenchop						
2000		280	6.00	1,680		

¹ Marketing year average.

Hay: Stocks on farms, 1997-2001

Year	May 1	December 1
	<i>1,000 tons</i>	<i>1,000 tons</i>
1997	460	1,993
1998	414	2,093
1999	566	2,110
2000	1,170	2,800

Maple Syrup

Michigan maple syrup production was estimated at 60,000 gallons for the 2001 season, 16,000 gallons above the 2000 record low output. This season was a good year for the production of quality syrup. Sugar content of the sap was higher and the syrup was lighter in color than last year. Over two-thirds of the syrup producers reported that temperatures were favorable during the tapping season. This year's production is 36 percent above the

record low in 2000.

The average price per gallon for 2001 is \$31.40 compared with \$35.10 last year. The preliminary value of production for 2001 is estimated at \$1.9 million, up 22 percent from 2000. Michigan ranked seventh in maple production in 2001, the same as last year, and produced about 6 percent of the total US production.

Maple syrup: Production and price, 1997-2001

Year	Production	Price	Value of production
	<i>1,000 Gallons</i>	<i>Dollars</i>	<i>1,000 dollars</i>
1997	75	31.50	1,913
1998	55	32.00	1,760
1999	73	28.20	2,058
2000	44	35.10	1,544
2001	60	31.40	1,884

Mint

Mint: Acres, yield, production, and value, 1996-2000

Year	Harvested	Yield	Production	Price per pound ¹	Value of production
	<i>1,000 acres</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>Dollars</i>	<i>1,000 dollars</i>
Peppermint					
2000	1.0	50	50	9.00	450
Spearmint					
1996	1.3	21	27	12.20	329
1997	1.5	34	51	11.00	561
1998	1.7	42	71	11.20	795
1999	1.7	40	68	10.00	680
2000	1.7	45	77	9.20	708

¹ Marketing year average.

Oats

Oat acreage decreased in Michigan during 2000. Growers planted 95,000 acres of oats in 2000 compared with 100,000 the year before. Harvested acres, at 75,000, remained the same as last year. The 2000 oat production was 4.80 million bushels, down 2 percent from the previous year. Yields were down 1 bushels per acre from 1999, at 64 bushels per acre. Michigan oat harvest was

completed by the five year average date. Oat condition was 69 percent good to excellent in mid August when growers were well into harvest. The season was cooler and wetter than normal in most of the Lower Peninsula. Sanilac county ranked first in oat production for 2000, while Huron, Presque Isle, Alpena, and Grand Traverse round out the top five counties.

Oats: Acres, yield, production, and value, 1996-2000

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Bushels</i>	<i>1,000 bushels</i>	<i>Dollars</i>	<i>1,000 dollars</i>
1996	70	60	60	3,600	2.41	8,676
1997	95	80	61	4,880	1.86	9,077
1998	110	100	48	4,800	1.42	6,816
1999	100	75	65	4,875	1.35	6,581
2000	95	75	64	4,800	1.20	5,760

¹ Marketing year average.

Potatoes

Michigan's 2000 potato production was 14.96 million hundredweight (cwt.) unchanged from a year ago. Planted acres were 49,000, up 1,000 acres while harvested acres, at 47,500, were unchanged from 1999. The state's average yield remained a record tying 315 cwt. per acre for the third straight year. The spring of 2000 was wet and came late but the weather was quite favorable during the growing season. The weather was also very conducive for late blight development. In some parts of the State, late blight affected almost all growers.

Michigan ranked ninth among states in potato production in 2000. Most Michigan potatoes are whites, which comprise approximately 82 percent of planted acreage, followed by russets and reds which comprise approximately 15 and 3 percent of planted acreage, respectively. Whites are sold for table use or processed for potato chips while russets are used for french fries and other frozen products.

Fall potatoes: Acres, yield, production, and value, 1996-2000

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Cwt</i>	<i>1,000 cwt</i>	<i>Dollars</i>	<i>1,000 dollars</i>
1996	52.0	46.0	300	13,800	5.80	80,040
1997	48.0	47.5	300	14,250	6.45	91,913
1998	47.0	46.5	315	14,648	6.70	98,142
1999	48.0	47.5	315	14,963	6.80	101,748
2000	49.0	47.5	315	14,963	6.85	102,497

¹ Marketing year average.

Fall potatoes: Stocks by type as percent of total stocks, December 1, 1996-2000

Type	1996	1997	1998	1999	2000
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
White	78	72	81	87	86
Russet	19	27	18	11	12
Red	3	1	1	2	2

Fall potatoes: Production and disposition, 1996-2000

Crop year	Production	Total used for seed	Farm Disposition		Sold
			Seed, feed, and home use	Shrinkage and loss	
	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>
1996	13,800	768	300	1,300	12,200
1997	14,250	864	200	1,300	12,750
1998	14,648	888	200	1,348	13,100
1999	14,963	1,005	213	1,300	13,450
2000	14,963	(¹)	(¹)	(¹)	(¹)

¹ Not available at publication time.

Fall potatoes: Stocks, 1996-2000

Crop year	December 1	January 1	February 1	March 1	April 1	May 1
	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>
1996	8,000	6,600	4,600	3,300	1,900	1,000
1997	8,500	7,000	5,500	3,800	2,300	1,000
1998	9,100	7,500	5,400	4,100	2,200	800
1999	8,800	7,100	5,800	4,200	2,700	1,300
2000	8,700	6,900	5,200	3,400	1,500	700

Soybeans

Michigan soybean production totaled 74.9 million bushels, down 4 percent from 1999. The yield was 36 bushels per acre in 2000. Planted and harvested acres were up from the 1999 total to 2.1 million and 2.08 million, respectively. By June 1, farmers had 77 percent of the soybean acres planted. Soybeans were behind normal for the growing season due to wet conditions. Japanese

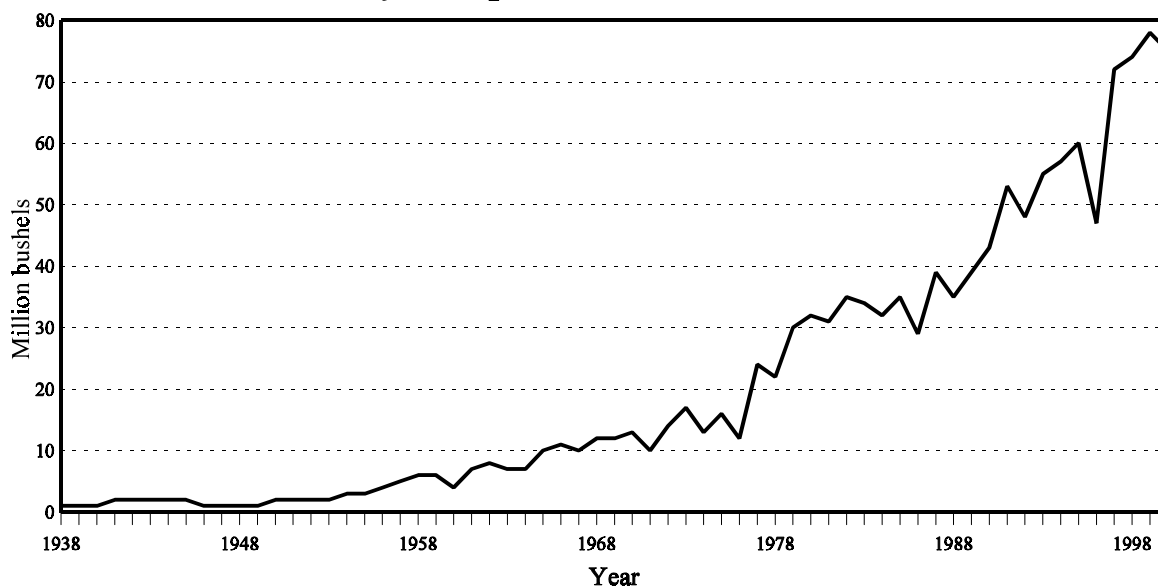
beetle damage in some fields was noticeable. Soybean aphids were reported in most counties. Unfavorable weather condition caused the crop to mature slowly, making it one to two weeks behind normal. Harvest was 96 percent completed on November 19. Lenawee, Sanilac, Monroe, Saginaw, and Tuscola were the top counties in soybean production.

Soybeans: Acres, yield, production, and value, 1996-2000

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Bushels</i>	<i>1,000 bushels</i>	<i>Dollars</i>	<i>1,000 dollars</i>
1996	1,650	1,640	28.5	46,740	7.15	334,191
1997	1,870	1,860	38.5	71,610	6.47	463,317
1998	1,900	1,890	39.0	73,710	4.99	367,813
1999	1,950	1,940	40.0	77,600	4.61	357,736
2000	2,100	2,080	36.0	74,880	4.75	355,680

¹ Marketing year average.

Soybean production, 1938-2000



Soybeans: Stocks by quarter, 1996-2000

Crop year	December 1		March 1		June 1		September 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>
1996	12,000	15,068	7,000	8,642	3,000	2,767	700	865
1997	19,000	20,931	12,000	10,646	4,000	4,677	1,500	1,262
1998	30,000	18,000	22,000	9,950	11,000	5,600	4,000	2,150
1999	33,000	20,200	17,000	12,750	6,000	6,250	4,100	1,500
2000	30,000	19,800	18,000	9,600	8,500	3,450		

Soybeans: Percentage of acreage planted, 1996-2000

Year	Month and day						
	May			June			July
	10	20	30	10	20	30	10
1996	1	7	32	71	77	94	100
1997	5	19	60	84	100	100	100
1998	10	56	81	92	98	100	100
1999	12	49	81	93	99	100	100
2000	12	29	42	63	82	94	100
5-year-average	12.0	29.0	42.0	63.0	82.0	94.0	100.0

Soybeans: Percentage of acreage setting pods, 1996-2000

Year	Month and day					
	July			August		
	10	20	30	10	20	30
1996	0	0	0	20	51	95
1997	0	2	20	53	93	100
1998	0	17	57	73	96	100
1999	0	20	48	77	93	100
2000	0	4	20	42	74	86
5-year-average	0.0	8.6	29.0	53.0	81.4	96.2

Soybeans: Percentage of acreage shedding leaves, 1996-2000

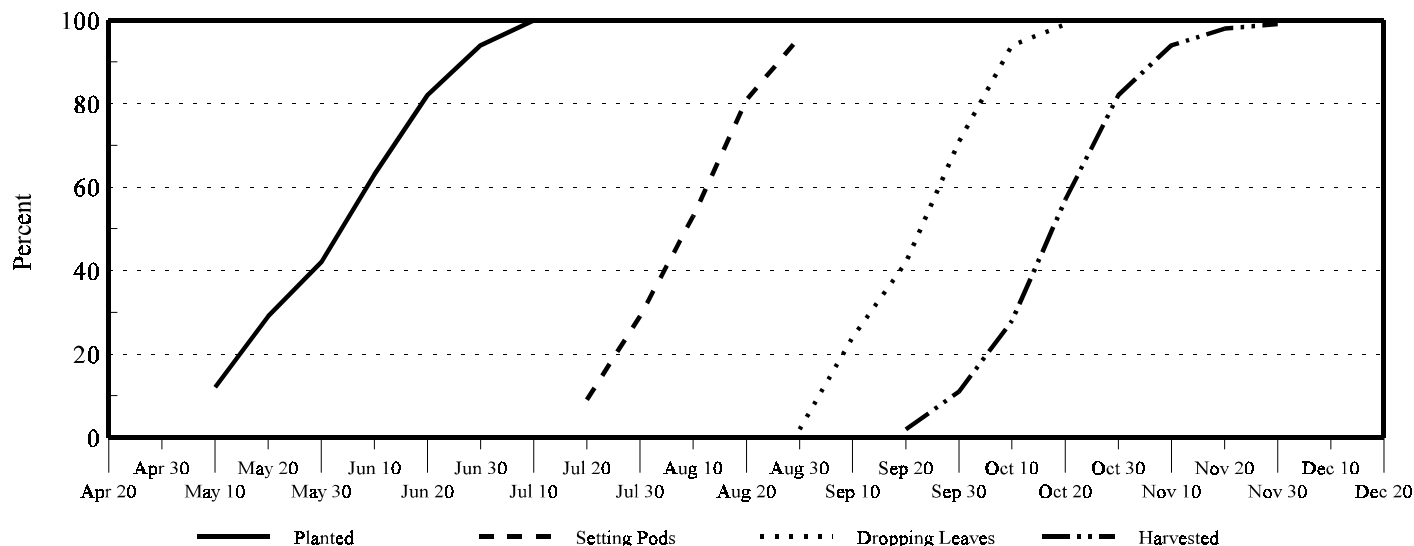
Year	Month and day						
	August		September			October	
	20	30	10	20	30	10	20
1996	0	1	4	20	56	91	100
1997	0	0	7	24	57	98	100
1998	0	9	40	68	87	100	100
1999	0	2	31	66	98	100	100
2000	0	0	3	26	54	78	93
5-year-average	0.0	2.4	24.2	42.2	71.2	93.8	99.0

Soybeans: Percentage of acreage harvested, 1996-2000

Year	Month and day								
	September			October			November		
	10	20	30	10	20	30	10	20	30
1996	0	0	3	11	40	70	93	96	99
1997	0	0	4	25	64	81	90	95	98
1998	0	3	22	44	66	93	99	100	100
1999	0	5	22	46	67	92	98	100	100
2000	0	0	3	15	48	76	92	100	100
5-year-average	0.0	1.6	10.8	28.2	57.0	82.4	94.4	98.2	99.4

Soybean progress

Five-year-average, 1996-2000



Sugarbeets

Acres planted for sugarbeets dropped for the first time in five years in Michigan and decreased 3 percent in 2000 to 189,000 acres planted. Harvested acreage, at 166,000, decreased 13 percent from the previous year record high. Acres idled were attributed primarily to the PIK program. All of the crop was planted by the middle of May. Growing conditions for the sugarbeet crop were

excellent. Some concern for above normal temperatures were reported in November, but soil conditions were near-perfect for this year's crop. Yields averaged 20.5 tons per acre compared with 18.6 tons per acre in 1999. The total tonnage decreased 4 percent from 1999, record high. Huron and Tuscola were the top sugarbeet producing counties for 2000.

Sugarbeets: Acres, yield, production, and value, 1996-2000

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Tons</i>	<i>1,000 tons</i>	<i>Dollars</i>	<i>1,000 dollars</i>
1996	153	130	15.1	1,963	41.60	81,661
1997	163	160	19.0	3,040	38.50	117,040
1998	177	173	16.0	2,768	36.70	101,586
1999	194	190	18.6	3,534	32.80	115,915
2000	189	166	20.5	3,403	(²)	(²)

¹ Marketing year average.

² Not available at publication time.

Wheat

Michigan's 2000 winter wheat crop totaled 36.0 million bushels, down 13 percent from 1999. Planted acres were down 80,000 from the previous year to 530,000. Harvested acreage fell 100,000 from 1999 to 500,000. The average yield was a record high 72 bushels per acre. The value of the crop dropped 14 percent to \$76 million. Sanilac, Huron, Lenawee, Saginaw, and Shiawassee were the top five counties in wheat production.

The planting began on schedule the second week of September. It proceeded unabated by any inclement weather and was virtually

completed by the end of October, the normal time. Emergence was also equal to the 5-year average throughout the warm, dry fall. There was little snow cover during dormancy, but the winter weather was unseasonably warm. Michigan's wheat harvest began around July 4th, a few days behind average. Progress in mid-July, however, was rapid, and combining was virtually complete by the end of the month, ahead of normal. The wheat yield broke the previous record of 69 bushels set just last year.

Winter wheat: Acres, yield, production, and value, 1996-2000

Year	Planted	Harvested	Yield	Production	Price ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Bushels</i>	<i>1,000 bushels</i>	<i>Dollars</i>	<i>1,000 dollars</i>
1996	680	600	38	22,800	3.91	89,148
1997	530	520	62	32,240	3.26	105,102
1998	600	570	54	30,780	2.33	71,717
1999	610	600	69	41,400	2.12	87,768
2000	530	500	72	36,000	2.10	75,600

¹ Marketing year average.

Wheat: Stocks by quarter, 1996-2000

Crop year	September 1		December 1		March 1		June 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>
1996	2,300	12,963	1,300	9,952	800	9,108	400	5,235
1997	2,700	18,750	1,900	16,005	1,200	11,035	500	6,223
1998	6,500	25,200	4,500	21,000	3,000	17,500	1,100	12,000
1999	5,000	31,050	3,000	25,050	2,800	19,450	1,900	12,900
2000	7,000	28,950	4,100	22,400	3,000	17,150	800	11,900

Wheat yield, 1925-2000

